



University of Dundee

Reflexive mapping exercise of services to support people experiencing or at risk of homelessness

Rodriguez, Andrea; Arora, Garima; Beaton, Laura; Fernandes, Fernando Lannes; Freeman, Ruth

Published in:
Journal of Social Distress and Homelessness

DOI:
[10.1080/10530789.2020.1808344](https://doi.org/10.1080/10530789.2020.1808344)

Publication date:
2021

Document Version
Peer reviewed version

[Link to publication in Discovery Research Portal](#)

Citation for published version (APA):

Rodriguez, A., Arora, G., Beaton, L., Fernandes, F. L., & Freeman, R. (2021). Reflexive mapping exercise of services to support people experiencing or at risk of homelessness: a framework to promote health and social care integration. *Journal of Social Distress and Homelessness*, 30(2), 181-190.
<https://doi.org/10.1080/10530789.2020.1808344>

General rights

Copyright and moral rights for the publications made accessible in Discovery Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Title: Reflexive mapping exercise of services to support people experiencing or at risk of homelessness: a framework to promote health and social care integration.

Andrea Rodriguez¹, Garima Arora², Laura Beaton³, Fernando Fernandes⁴ and Ruth Freeman⁵.

¹Senior Research Fellow, Dental Health Services Research Unit, School of Dentistry, University of Dundee, Scotland/UK; a.rodriquez@dundee.ac.uk

²Research Assistant, Dental Health Services Research Unit, School of Dentistry, University of Dundee, Scotland/UK; g.arora@dundee.ac.uk

³Research Fellow, School of Dentistry, University of Dundee, Scotland/UK; beaton@dundee.ac.uk

⁴Senior Lecturer, School of Education and Social Work, University of Dundee, f.l.fernandes@dundee.ac.uk

⁵Co-director of the Dental Health Services Research Unit, School of Dentistry, University of Dundee, Scotland/UK; r.e.freeman@dundee.ac.uk

Abstract

This article describes the process to create a framework to map services for people experiencing and/or at risk of becoming homeless. Using a participative and multi-agency approach the Reflexive Mapping Exercise (RME) was proposed to increase knowledge on what is available to address the health and social care needs of those experiencing homelessness and to encourage synergies between sectors addressing prevention and management of homelessness. Applied in the Scottish context of design and implementation of national and local policies, this framework identify gaps in service provision and can be a tool to improve integration and communication between services to support vulnerable groups. The RME results provided information of the current status of services in eight areas of care, combined with their spatial distribution. The analysis revealed an unequal distribution of services, with major focus on services addressing crisis periods of homelessness and less on prevention and sustainability out of homelessness. The REM has been informing the redesign of services of a local five years homelessness strategic plan (2016-2021) in a Scottish city, with high levels of deprivation, and can be used to create more integrated pathways to health and social care for people experiencing extreme social exclusion.

¹ Senior Research Fellow, Dental Health Services Research Unit, School of Dentistry, University of Dundee, Scotland/UK; a.rodriquez@dundee.ac.uk

² Research Assistant, Dental Health Services Research Unit, School of Dentistry, University of Dundee, Scotland/UK; g.arora@dundee.ac.uk

³ Research Fellow, School of Dentistry, University of Dundee, Scotland/UK; beaton@dundee.ac.uk

⁴ Senior Lecturer, School of Education and Social Work, University of Dundee, f.fernandes@dundee.ac.uk

⁵ Co-director of the Dental Health Services Research Unit, School of Dentistry, University of Dundee, Scotland/UK; r.e.freeman@dundee.ac.uk

Key words

Reflexive Mapping Exercise, Integrated Care, Homelessness, Inequalities, Multi-agency Working.

Introduction

In Scotland, 34,972 homelessness applications were made in 2017-2018 with a first increase in ten years (Scottish Government, 2018). Despite a Government Housing Options approach, homeless prevention strategies seem to be failing or can no longer result in “further large reductions in applications beyond those already seen” (Scottish Government, 2018, p.4). A possible explanation may be on the challenges presented by the Commission on the Future Delivery of Public Services (Scottish Government, 2011) that highlighted a need for more integration and collaboration between services to allow community-led and design around users’ needs. There is a mutual consensus that to tackle homelessness it is necessary to develop multi, accessible, person-centred, integrated and equitable distribution of services (Scottish Housing Regulator, 2014; Scottish Government, 2014, 2016, 2018). However, initiatives to increase understanding on what is available combined with strategies to improve service users’ accessibility to health and social care sectors are still an urgent call.

The need for integrated care is reinforced as increases of complexity and variety of demands are presented by this population. Over a five years period (Scottish Government, 2018) almost half of those assessed as homeless (47%) have one or more support needs beyond housing, including: mental health problems (49%), learning disabilities (6%), physical disabilities (11%), medical conditions (21%), alcohol and drug dependency (24%) and lack of housing management/independent living skills (47%). This highlights how people experiencing homelessness face multi and complex health and social demands, when compared to the general population (Scottish Government, 2018; Hwang, 2001; Coles et al., 201; Fernandes & Sharp, 2015).

Current studies conceptualise as extreme health inequity (Aldridge et al., 2018; Luchenski et al., 2018) these situations evidencing the lack of an integrated and efficient health-care access for those affected by homelessness which could help to break the vicious cycle of homelessness (Morrison, 2009; Sprake et al., 2014; Homeless Link, 2014). In the same direction, other studies underlined the socio-economic aspect with poverty being a main driver for homelessness (Bramley & Fitzpatrick, 2018) in the UK, rather than,

a simple association with individual's behaviour change (Bramley & Fitzpatrick, 2018; Johnsen & Watts, 2014).

The current Scottish policy for health and social care integration - the Public Bodies (Joint Working) (Scotland) Act 2014, recommends a holistic approach to address the rights and needs of those demanding multiple care support, simultaneously. As result, from April 2016, all NHS Boards, Third Sector and Local Authorities were required to have full operational plans that incorporate a 'cross-sector collaboration' (Allen et al., 2018; Edwards & Miller, 2003) to deliver integrated and effective services as a central aspect of government's policy (Salmon, 2004; Robinson & Cottrell, 2005; Richardson & Asthana, 2006).

However, accessing different types of support in the same time can be difficult for those experiencing extreme exclusion, even when the services exist. This is a consequence of practitioners and service users not being always well-informed about available local resources, as well the lack of clear pathways to refer (Khanlou et al, 2015). Consequently, diverse approaches based on informal or non-routinised practices make referrals become dependent on relationships between frontline staff with other services. Thus, they are subject to suffer a lack of continuity and loss of information when practitioners leave their posts as the interruption of communication among services can act as a barrier for multi-sectorial working (Allen et al., 2018; Bryson et al., 2006).

The proposed Reflexive Mapping Exercise (RME) Framework provides a way to fully embrace the current Scottish health and social care integration policy using a participative and multi-agency approach for better knowledge, integration and communication of services to prevent and tackle homelessness. The RME presents an opportunity to encourage synergies and partnerships between different sectors of care; such as to facilitate communication and integration of services that can maximise user's access. The RME was inspired by previous work conducted in Brazil involving:

1. A multi-agency working strategy to support the creation of alternatives of life for young people with convictions, living in deprived areas of Rio de Janeiro (Fernandes & Rodriguez, 2009) and;
2. A mapping of community organisations and services based in the largest favela (slum) in Rio de Janeiro State to inform local development plans (Redes da Mare, 2000).

Following these experiences, the Scottish RME model included a new element, a 'reflexive' component based on the need to create more spaces to bring organisations together to think on collective strategies to deliver cross-sector collaborative work.

The RME aimed:

1. The increasing of people and practitioner's knowledge on what is available to support those experiencing extreme exclusion, homelessness or threatened by homelessness;
2. The production of insights to mobilize a collaborative agenda in search for better distribution, communication and integration of services within the homelessness context.

The RME took place in one of the Scottish local authorities with the highest levels of socio-economic deprivation (Rodriguez et al., 2019) and is part of a strategic five years local plan to prevent and tackle homelessness (2016-2021). It is informing the work carried out by the Dundee City Council's Joint Strategic Commissioning for Homelessness (JSCH).

1. Project background

The project draws on the research findings of the Scottish oral health improvement programme for people experiencing homelessness – Smile4life (Freeman et al., 2011). Focused on oral health promotion and psycho-social wellbeing the programme's implementation occurs through all NHS boards using a co-designed guide (Freeman et al., 2012) to support professionals working with people affected by homelessness. The evaluation of this intervention revealed a lack of effective integration between oral health services with other health and social care services (Beaton et al., 2016). A knowledge-gap about what was available combined with unknown pathways to refer was observed as a factor that could restrict access of homeless people to oral health and social care services. To address this challenge, a collaboration between University, policy makers and key NGOs in this field lead to the development of a Reflexive Mapping Exercise Framework (RME).

The RME approach involved a collective mapping of services and discussed joint strategies to fill gaps in service provision to strengthen homeless policy, cross-sector working and a holistic person-centred care approach. The outcomes of the RME have been used to address both, national (Scottish Government, 2014) and local (Dundee City Council, 2016) policies on health and social care integration.

Multiple faces of homelessness

Dundee is the fourth largest city in Scotland with an estimated population of 148,710 inhabitants (National Records of Scotland, 2017). Dundee has a lower level of life expectancy when compared to the rest of Scotland; higher level of morbidity and multi-morbidities experienced by those under 65 years old and a

higher rate of people who are economically inactive (Dundee City Council, 2016b). Regarding homelessness applications Dundee has the highest level of applications compared to the rest of Scotland with a 9% increase since 2016-2017.

In Scotland, every person considered homeless by the legislation is entitled to a roof/accommodation from day 1 (Housing Act 1977; Housing Scotland Act 1987). The accommodation may be provisory until permanent accommodation is sorted, however, there is no guarantee that a person experiencing homelessness will be able to secure stable accommodation because of the complexity of issues faced (at both individual and structural levels). In this paper, we adopt an expanded definition for homeless to accommodate those who were formally assessed as homeless by Local Authorities but also those at risk or threatened of being homeless (Shelter Scotland, 2019).

It is necessary to look at the levels of social deprivation in Dundee to analyse the different faces of homelessness. According the Scottish index of multiple deprivation (SIMD), a statistical tool used by local authorities to support policy and decision making - almost 31% of Dundee population live in the 15% most deprived areas in Scotland (Shelter Scotland, 2019). These are the neighbourhoods where the combination of low economic capital with low social capital can result in limited social mobility (Fernandes, Silva & Barbosa, 2018). These conditions are major structural factors that increase the risk of people becoming homeless. Individual drivers, such as adverse childhood experiences and history of alcohol and drug use should not be ignored but they cannot be an isolated reason for homelessness.

This broader context of homelessness imposes more pressure on services providers to prevent and tackle homelessness. Combined and coordinated protocols of care can be a relevant strategy, but as we will show in this paper, despite of a great number of services available, these are not always well articulated or under a more strategic and coordinated distribution.

Local Policy Design for Homelessness

The Dundee City Council Joint Strategic Commissioning for Homelessness (JSCH) has been responsible for the design and implementation of a local strategic plan to tackle homelessness (Dundee City Council, 2016), in partnership with 25 organizations. This plan is to be implemented in a period of five years from 2016 to 2021 and will meet its vision that “Each citizen of Dundee will have access to the information and support that they need to live a fulfilled life” and achieve integrated service delivery (Dundee City Council, 2016).

The plan involved several consultations with people with lived experience of homelessness who highlighted the feeling of helplessness experienced when bouncing from service to service, trying to navigate through the maze of options in the homelessness system (Dundee City Council, 2016). Therefore, considering service-user perspective, there was a strong demand for better dissemination of services information allied with an easy route to make referrals. This should be consistent, and routine based. To meet these policy requirements, the RME was created.

2. Method

The RME design to map services had five steps:

Step 1 An online search from Google to identify agencies and services for people experiencing or at risk of becoming homeless in Dundee City. Information from key websites (such as www.homelessuk.org and dundee.mylifeportal.co.uk) and combinations of appropriate keywords (such as homelessness; services to support homelessness; services to support vulnerable groups) were used in this search.

Step 2 Involved phone calls and informal visits of key agencies and services identified in Step 1. A snowball sampling technique was then implemented with these services suggesting additional ones to be added to the mapping. This process continued until a saturation point had been researched (i.e. duplicate names of services and agencies were being given by managers and front-line staff). This step took a considerable time of the research team and should be acknowledged in future and similar participative research approaches. Activities such as phoning services, having face-to-face meetings and shadowing practitioners despite the time consumed not just increased the information on services available but also provided insights to understand certain aspects of practitioners work when trying to engage with other services.

Step 3 A wider consultation with 62 stakeholders working in the homelessness context from diverse sectors (Academia, Local Authorities, NHS Boards, Third Sector Organizations) was made through a national Seminar. A list of services and agencies previously identified in Steps 1 and 2 were provided for the participants (62 delegates from 30 different organizations in Scotland) to validate the REM preliminary outcomes and identified other 53 new services to the mapping. The

event consultation also set up a series of recommendations on building collaborative work for homelessness, health and social care integration (Health and Homelessness Report, 2016).

Step 4 An extensive review and updating of all information included in the mapping was made in three periods of time. This was necessary as the dynamic of services is fluid and in constant change. The procedures in Steps 1 and 2 were mostly repeated each time to ensure that all services and agencies had their information checked.

Step 5 A final draft of the mapping was presented to the Dundee City Council's JSCH. The JSCH's 25 organizations from health and social care sectors, carefully reviewed and legitimated the information presented with last minor additions and comments. Then, a final version of the RME document was launched.

The RME design was undertaken between 2015 and 2019. Embedded in a process to strengthen a culture of collaborative working within and across homeless organizations, the consultation event (Step 3) acted as precursors of new dialogues, partnerships, cross-sector collaborations and closer relations established between key services. This allowed the construction of a common agenda for better cooperation and interdependence of services in health and social care sectors.

3.2. Approach to data analysis

A descriptive analysis was conducted. The mapped services were counted and divided in eight categories of support. These categories were chosen according to the services descriptions' intervention type. They were - 1) housing support, 2) advice and information, 3) health and psychosocial wellbeing support, 4) furniture support, 5) employment support, 6) food assistance, 7) education/ training support, and 8) community development and networking (Table 1 and Figure 1).

The spatial distribution of services across the city was made using address and post code information. The Scottish Index of Multi-Deprivation - SIMD – (Health and Homelessness Report, 2016) also was used as a reference to know which mapped organisations and services were based within Dundee City's 5% most deprived areas. SIMD 2016 is based on data zones (DZ) grouped to form seven domains - income, employment, education, housing, health, crime and geographical access, with thirty-eight indicators of deprivation. This was made in consideration to the fact that people living in the most deprived areas are

the most likely of becoming homeless. Other element considered for analysis was related with the number of services that were providing more than one type of support, as was confirmed that this population require have their multi and complex needs met by the services.

3.4. Ethical consideration

This project was conducted based on information available in the public domain and therefore research ethics application was not necessary.

4. Results

In total, 135 services were identified in the mapping (Graph 1) being divided through eight categories of support (Table1). The Figure 2. shows the spatial distribution of services across Dundee city and Figure 3 show the spatial distribution in the 5% most deprived areas.

Most services, nearly one third (32.6%), were providing support under the health and psychosocial wellbeing category with just 18% based in areas considered of higher deprivation. 14% of these services also offered one more type of support (such as in information/advice and education/training). This may be considered as a strength as service provision offering multiple types of support (Figure 4) under one roof increase the chances to reach people with complex needs.

The second largest category of support found was related to Food Assistance (18.5%), with 27% based in the most deprived areas. Four services (16%) under this category offered more than one service. The third largest services were under Housing Support and Education/Training categories (16.2% for both). Nearly 14% of the Housing Support services were in the most deprived areas. Five of them offered support in other categories. Education/training category had one service in the most deprived areas with 27% of services offering support in other categories.

Furniture support, Employment and Community Development and Networking categories had 2.2%, 2.2% and 1.5% of services respectively. None of the services under these support categories offered any other support. A third of services in Employment support were in the most employment deprived area according SIMD 2016 which is measured by the extent of unemployment benefits dependency.

Discussion

The RME data shows a strong concentration (more than 50%) of services in central areas (city centre surrounds), and few services in locations with higher levels of socio-economic deprivation. Most of these

were from health and psychosocial wellbeing support and food assistance, and none from Education/Training. This was considered insufficient as services offering educational training are essential when this population seek to overcome homelessness through new job opportunities.

It seems that services located in central areas perhaps have the idea that people may find it easier to access. However, in many occasions, individuals experiencing homelessness do not have financial resources to afford public transport. There are several cases when individuals walk for over one hour to have a meal in soup kitchen services or to meet health appointments (Fernandes & Sharp, 2015).

This is an issue to address the 'health inequities' agenda and raises concerns to extent the accessibility of some services (Freeman et al., 2011) as there are complex reasons preventing homeless people to access services. Some studies (Scottish Government, 2016b) show that community-based healthcare is most cost-effective and, given the way they are set-up, they may tend to work better for homeless people.

Despite the geographic concentration of services, the RME data revealed certain versatility in some services that offered a range of types of support under 'one roof'. This was a positive aspect of service provision, once offers immediate opportunity for service users' engagement in a kind of 'all-in-one' provision-site. This is central for homeless people, in general presenting multiple needs in different stages of their journey. However, the presence of multiple services offering different types of care does not guarantee they are being accessed with the frequency they should be. Issues of stigma and lack of confidence can be factors that push homeless people down, isolating them from practitioners and services, functioning as barrier for accessing services or enabling disengagement from services (Edward, 2014; Hatzenbuehler, Phelan & Link, 2013).

Drop-in centres were found as providing a safe environment during the day with provision of meals, clothes, counselling and other referrals related with homelessness. Indeed, we have acknowledged that these centres offer a warming welcome to homeless people, in a non-judgemental approach, which is also fulfilled with a sense of compassion and care. This is not well established in services where the pressure for staff time and tensions between users and institutional rules can become an issue that eventually, can lead to service disengagement (Fernandes & Sharp, 2015).

A major gap in terms of service provision type is the lack of services to address homelessness prevention and sustainability outside the homeless cycle, after they get the tenancy. One of the key difficulties experienced by homeless people is to sustain a stable accommodation. Periods of hardship followed

benefit sanction, or drug misuse issues can be factors that contribute for that (Fernandes & Sharp, 2015). But not only, with the advance of austerity policies and the implementation of universal credit, many people are faced with difficulties to meet the necessary budget to pay for the bills, added to this the fact that in many cases, people do not have the basic budgeting skills (something that has been addressed by some organisations with training and advisory initiatives).

We believe that, in addition to the aspect of spatial distribution of services, other priority should be given to create ways to better inform which services are available with an easy and constant method of updating the information. The service sector for homeless (Brooks et al., 2004) is fluid and always changing, needing then to be revisited continuously. The RME presented in this paper was an attempt to gradually and collectively to gather and organise information in a way to mobilise those involved in service provision to reflect about their gaps, approaches and opportunities for better articulation and integration. The challenge now is to use this opportunity to keep mobilising resources towards a more organised, centralised and coordinated joint action that can only benefit homeless people and, at the same time, maximise the resources and efforts met by organisations in the field.

Limitations and Implications for further research

The mapping exercise has also raised a number of areas that demand further exploration. For example, the issue of geographical distribution deserves more analysis of micro-data at census level, and feasibility studies for the implementation of more services. In our study, we could not explore in detail the level of preparedness of staff and volunteers working in homeless support services. This is, however, a relevant knowledge gap that should be part of further studies as the contact between homeless people and service providers – at a human interaction level, is very important and in many occasions, this is the only link they have with institutionalised forms of support.

Potential discussion on the diversity of ways that agencies providing services for homeless people or those at risk are overcoming the challenges to achieve a better integration between sectors of care also should be more explored. We are aware that, considering all aspects involved to address these challenges, what the RME undertaken in one Scottish city is not enough to fully address this. However, it is pertinent to highlight that there was no intention to produce a complete mapping covering all services in Dundee as the task would be unrealistic considering the timeline, structure of the project and the dynamic involving services provision, which would require a continuous work on updating data. Thus, the emphasis was

placed on the RME as a process to encourage dialogues and partnerships between services and practitioners.

Conclusion

Lesson learned: potentialities of the Reflexive Mapping Exercise

Dundee City offers a unique combination of relatively small geographic area, with a relatively large number of services and active local government efforts to bring initiatives together with a more coordinated action. This puts Dundee, undoubtedly, in an advantageous position to tackle homelessness and wider poverty. Some aspects, however, need to be considered in a way to help Dundee and similar contexts to improve and achieve the highest possible impact. There is need to develop more services focused on prevention and sustainability outside homelessness. As some services are superposed, better coordination is also needed in a way to maximise resources and energy. This, however, has, as main barrier the unequal geographic distribution of services and the difficulty to make it available for those living in the outskirts of the city. Coordinated effort will be necessary to address this issue, which implies in more public funded support in conjunction to non-governmental funding.

The mix of governmental and non-governmental services in Dundee has been previously observed as positive, and can offer potential to reflect upon more humanised approaches that can challenge the pressures experienced by services, such as more time for engagement with users, getting to know better their stories, developing a more participatory and engaged environment to decide on individual's needs. More space for inter professional learning, with opportunities to share experiences, test new approaches and explore alternative routes for service engagement also can be areas of consideration when working with marginalised groups (Health and Homeless Report, 2016; Fernandes & Rodriguez, 2015).

The RME has been designed as a resource that can support practitioners on their everyday practice, reflect upon the possibilities for connections and collaborative work and the development of more strategic approaches that combine interconnected efforts. Moreover, we expect that the mapping has increased awareness and knowledge of what is available combined with the needs of the users. The mapping analyses identified areas for improvement through a practical framework that will increase dialogues, partnerships between services in this field and access to services from health and social care sectors.

The case presented here was embedded in a broader strategy lead by a Local Authority to respond the challenges to mitigate and prevent homelessness. The mapping informed this initiative and has been

contributed to articulate services and to design local policies on homelessness, meeting the main principle of social change that should be part of academic universe. As such, the Reflexive Mapping Exercise needs to be taken as an attempt to mobilize key actors in the homeless care sector towards a more reflexive process in which service providers can consider the limitations of their services, the barriers for better integration, as well the achievements when working together.

The mapping exercise can be a relevant strategy to be adopted by any set of organisations or local government aiming to generate information that can support strategic planning for homeless services with a promotion of mutual trust and dialogue across agencies, from both governmental and non-governmental nature. It can be a useful tool that can offer frontline workers and volunteers the information to develop *layered* networking and collaboration – which can be more horizontal and respectful of organisations perspectives.

Tables, Figures and Graphs

Graph 1 – Services available for people affected by or at risk of becoming homeless in Dundee

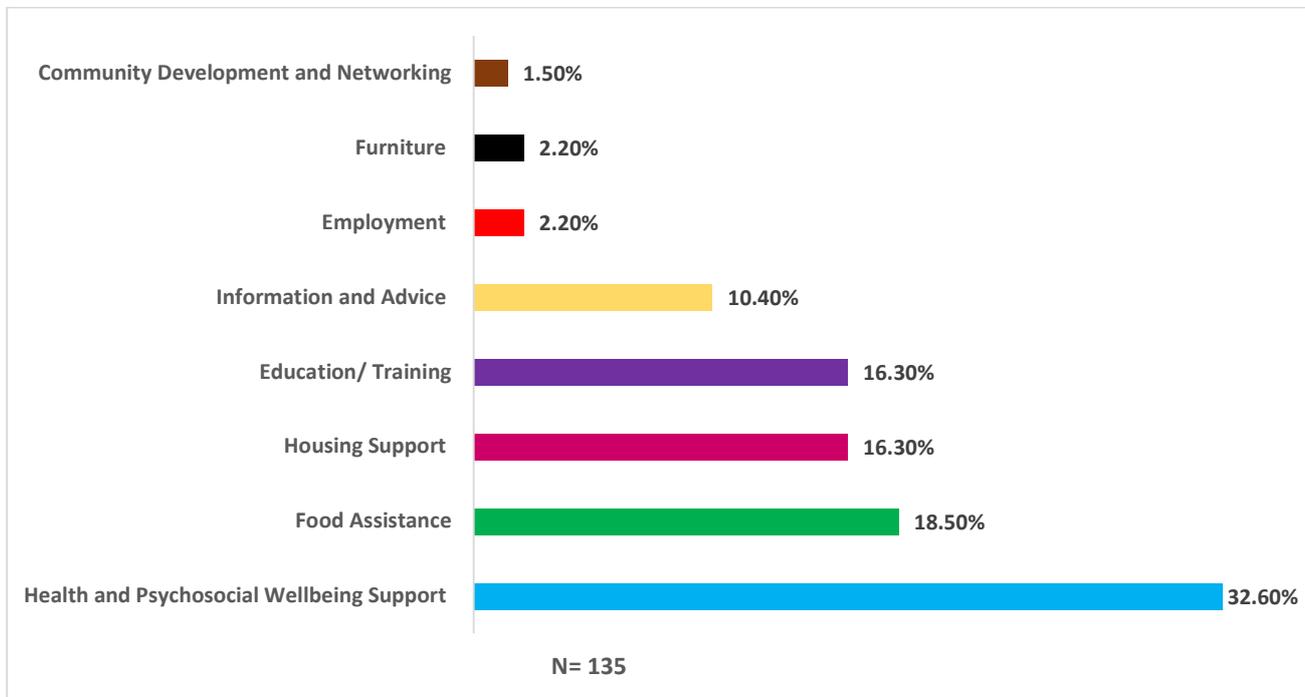


Table 1 – Identified services according to category, key features and nature of service offered

Service category	Number of services found	Key features	Types of services provided
Housing support	22 (16.3%)	Organisations providing accommodation (short- term, long- term, temporary and sheltered), assessment and resettlement support to individuals who are homeless or potentially homeless.	Services in this category includes a range of activities such as: provision of temporary accommodation; assistance to move on to permanent accommodation; advice on housing options; meals; medical facilities; key worker support; job clubs; IT classes; one-to-one counselling; and alcohol education.
Advice and Information	14 (10.4%)	Organisations providing information and advice on housing, welfare rights.	Services in this category includes a range of activities such as: provision of one-to-one befriender support to young people; advice and information on- housing matters; social security benefits and pensions; employment, family and personal matters; taxes; welfare rights; and financial issues.

Health and Psychosocial Wellbeing Support	44 (32.6%)	Organisations providing services to improve general health, mental health, dental health, substance misuse/ addiction/ recovery, harm reduction and sexual health to individuals experiencing homeless, children and young people and families.	Services in this category includes a range of activities such as: outreach nurse-led and/or medical drop-in clinics in hostels and home visiting; assessment of health and social care; information and referral to services such as drug addiction, sexual health; mobile dental van and dental emergency clinics, one to one support to women, young women and girls who have been raped or sexually abused; listening services; mental health support; group activities for children and young people; group support and workshops for parents and people with learning disabilities.
Furniture Support	3 (2.2%)	Organisations provide furniture, clothing and household goods to people in need.	Services in this category includes a range of activities such as: collecting donations of household items from local public and other organisations (inspect the items, refurbish them and resell in their retail premises.) Some items are re-cycled and are made up into 'starter packs'.
Employment Support	3 (2.2%)	Organisations providing support on employment opportunities to individuals who are homeless or rough sleeping, in temporary accommodation, at risk of becoming homeless or unemployed and facing financial crisis.	Services in this category includes a range of activities such as: delivery of social and financial inclusion by supporting Big Issue magazine vendors; administration of claims-Jobseeker's Allowance; Incapacity Benefit; Employment and Support Allowance; and Income support and employment; and volunteering opportunities.
Food Assistance	25 (18.5%)	Organisations providing food in drop-in's centres, soup kitchen and cafe's to rough sleepers, homeless, people with addictions; in prostitution; unemployment and anyone in the community.	Services in this category includes a range of activities such as: late evening and early morning provision of hot drinks, food, warm clothes to rough sleepers; drop-in for food at a Church/ cafe; food parcels are provided to unemployed parents or anyone in need; Dundee Foodbank Distribution Centres work across multiple locations in the city and receive referrals for a food parcel from doctors, health visitors, benefit advisors, homeless workers, CAB and police.
Education/ Training	22 (16.3%)	Organisations provide support on life skills, employment, education and qualifications, training and gardening to young people and adults.	Services in this category includes a range of activities such as: opportunities to improve learning skills and personal development, apprenticeships, and identification of vocational goals through: employability funds; writing CVs, filling out application forms, mock interviews, placements, improving IT skills; budgeting; opportunities to gain SQA

			Qualifications; language classes, workshops on cooking, arts and crafts, sewing, driving theory; community development opportunities; specialist organisation working with offenders, ex-offenders and those at risk to reduce re-offending through training and employment opportunities; gardening skills opportunities to improve self-worth and confidence.; employability and befriending support to Muslim and Ethnic Minority women.
Community Development and Networking	2 (1.5%)	Organisations helping poorest and marginalised groups, including people experiencing homelessness to strengthen connections and encourage collaborative working.	Services in this category includes a range of activities such as: church-based projects related with crisis intervention, information on existent drop-ins, facilitating social interaction in local communities.

Figure 2 – Spatial distribution of services in Dundee

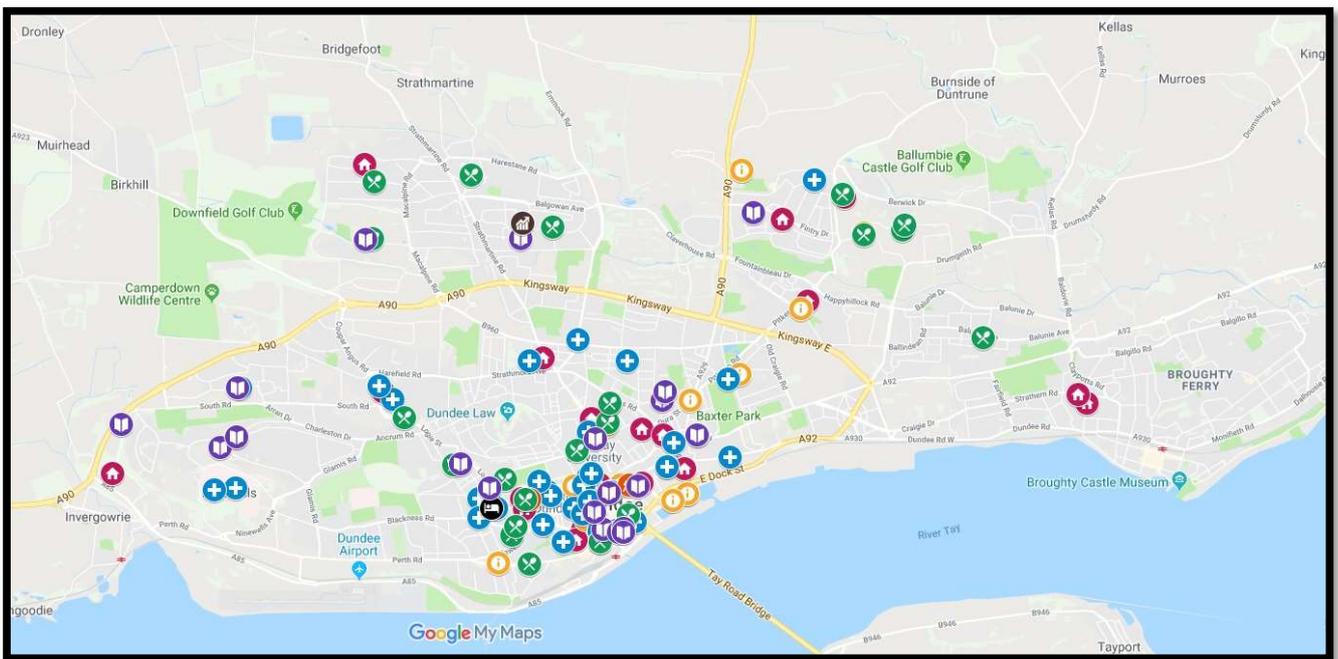


Figure 3 - Spatial distribution of services in the 5% most deprived areas

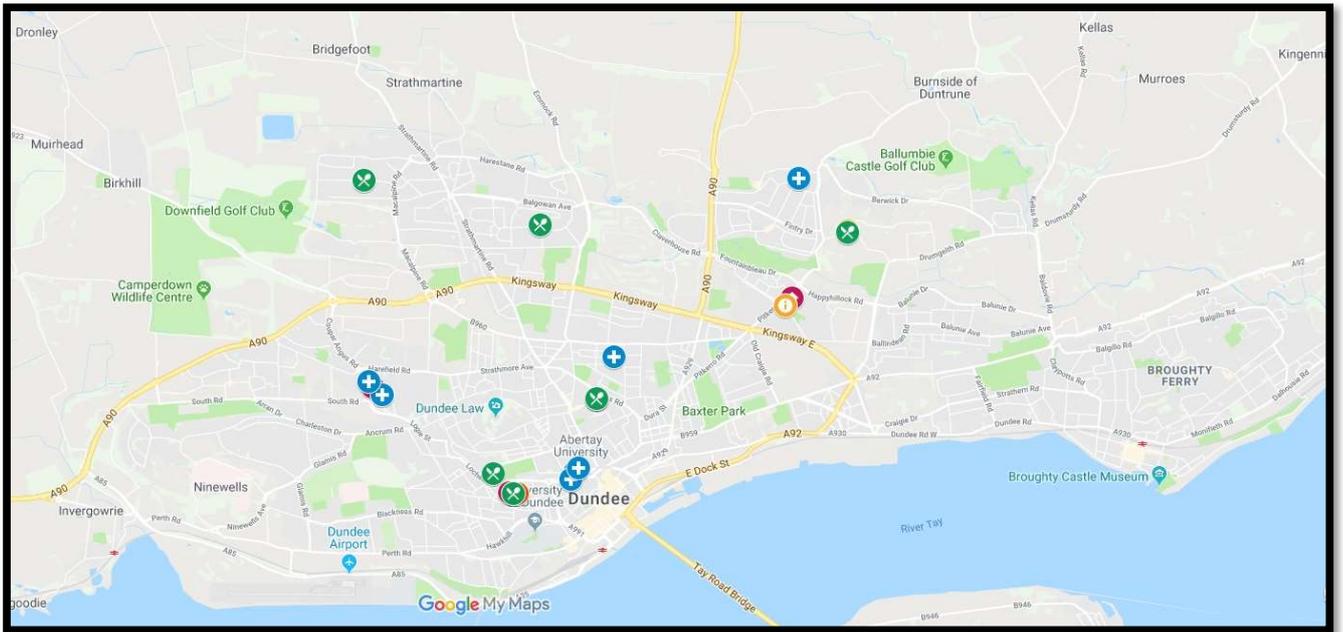


Figure 4– Number of services within each category offering more than one type of support

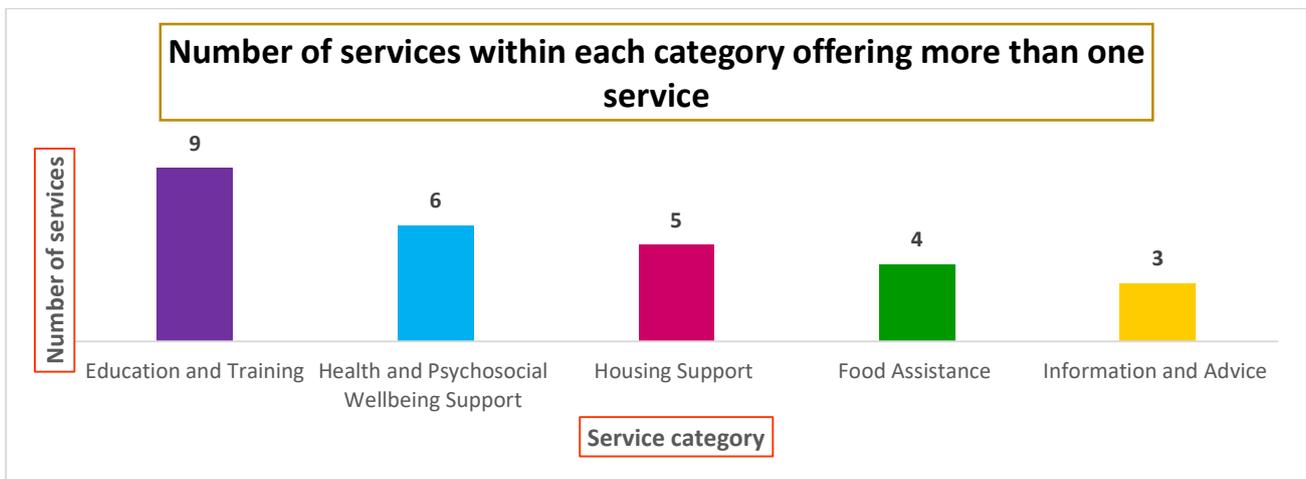


Table 3– Services with more than one location

Service category	Unknown post code/ Address	Services with more than one location
Housing Support	1	2
Information and Advice	1	0

Health and Psychosocial Wellbeing Support	3	3
Furniture	0	0
Employment	1	0
Food Assistance	2	2
Education /Training	0	1
Community Development and Networking	1	0

Declaration of interest

The authors report no conflicts of interest.

References

- Aldridge RW, Story A, Hwang SW, Nordentoft M, Luchenski SA, Hartwell G, Tweed EJ, Lewer D, Vittal Katikireddi S & Hayward AC (2018). Morbidity and mortality in homeless individuals, prisoners, sex workers, and individuals with substance use disorders in high-income countries: a systematic review and meta-analysis. *Lancet*. 20; 391: 241-250
- Allen J, Goldblatt P, Daly S, Jabbal J, Marmot M. (2018). Reducing health inequalities through new models of care: a resource for new care models. Available at: <http://www.instituteofhealthequity.org/resources-reports/reducing-health-inequalities-through-new-models-of-care-a-resource-for-new-care-models>, Accessed: 13 January 2019.
- Beaton L., Coles, E., Rodriguez, A. & Freeman, R. (2016). Exploring the benefits of Smile4life practitioner training – findings from a pilot study in 4 NHS Boards. *Community Practitioner*, October, (10) 42-47.
- Bramley & Fitzpatrick (2018). Homelessness in the UK: who is most at risk? *Housing Studies*, 33:1, 96-116.
- Brooks, R. A. et al (2004). The system-of-care for homeless youth: perceptions of services providers. *Evaluation and Program Planning* 27, 443-451.
- Bryson, J. M., et al. (2006) The Design and Implementation of Cross-Sector Collaborations: Propositions from the Literature. *Public Administration Review*, 66(s1): 44-55.
- Coles, E., Edwards, M., Elliot, G.M., Freeman, R., Heffernan, A., & Moore, A. (2011). The Oral Health of Homeless People across Scotland: Report of the Homeless Oral Health Survey in Scotland, 2008-2009. Dundee: University of Dundee.
- Dundee City Council (2016b). About Dundee. 13th edition. Dundee: Chief Executive Department.
- Dundee City Council. Joint Strategic Commissioning for homelessness (2016a). Not Just a roof. Housing Options and Homelessness Support Strategic Plan 2016-2021.
- Edwards, M. & Miller, C. (2003). Integrating Health and Social Care and Making it work. London, Office of Public Management.
- Edwards, N. (2014). Community services. How they can transform care. The Kings Fund. Available at:

https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/community-services-nigel-edwards-feb14.pdf, accessed in December 2018.

Fernandes, F. & Sharp, G. (2015). The situation of people who are at risk of homelessness in the city of Dundee. Available at: <https://www.dundee.gov.uk/sites/default/files/publications/ddisurvey.pdf>, accessed in December 2018.

Fernandes, F. L., Silva, J. S. & Barbosa, J. L. (2018) The Paradigm of Potency and the Pedagogy of Coexistence. *Periferias*, 1. Available at: <http://revistaperiferias.org/en/materia/the-paradigm-of-power-and-the-pedagogy-of-coexistence/>, accessed in December 2018.

Fernandes, F.L. & Rodriguez, A. (2009). *Escape Routes: Lessons learned from the development of prevention methodologies and the creation of alternatives for adolescents and youngsters involved in drug trafficking*. Observatório de Favelas; International Labour Organization, Brasília; Geneva. Bilingual edition (Portuguese/English).

Fernandes, F.L. & Rodriguez, A. (2015). The “lost generation” and the challenges in working with marginalised groups. *Learnt lessons from Brazilian Favelas*. *Radical Community Work Journal*, 1(1).

Freeman, R., Coles, E., Edwards, M., Elliot, G.M., Heffernan, A., & Moore, A. (2011) *The Oral Health of Homeless People across Scotland: Report of the Homeless Oral Health Survey in Scotland, 2008-2009*. Dundee: University of Dundee.

Freeman, R., Coles, E., Watt, C; Edwards, M. & Jones, C. (2012). *Smile4life Guide for Trainers: better Oral care for Homeless people*. Edinburgh: NHS Health Scotland.

Hatzenbuehler, M.L., Phelan, J.C. and Link, B.G. (2013). Stigma as a Fundamental Cause of Population Health Inequalities. *American Journal of Public Health*, 103: 813–821

Health and Homelessness Report. Discussion Forum and Workshop: “Building collaborative work for homelessness, health and social care integration”. December 2016. University of Dundee; Shelter Scotland. Available at:

<http://dentistry.dundee.ac.uk/sites/dentistry.dundee.ac.uk/files/media/Health%20and%20Social%20Care%20report%20-%20Dundee.pdf>

Homeless Link (2014). *The unhealthy state of homelessness*. London: Homeless Link. Available at <http://www.homeless.org.uk/sites/default/files/site->

[attachments/The%20unhealthy%20state%20of%20homelessness%20FINAL.pdf](#), accessed in October 2017.

Housing (Homeless Persons) Act 1977. Available at:

<http://www.legislation.gov.uk/ukpga/1977/48/contents/enacted>, accessed in March 2018.

Housing (Scotland) Act 1987. Available at

<https://www.legislation.gov.uk/ukpga/1987/26/contents>, accessed in March 2018.

Hwang, S. W. (2001). Homelessness and Health. *Canadian Medical Association Journal*, 164, 229-233.

Johnsen, S. & Watts, B. (2014). *Homelessness and Poverty: Reviewing the Links*. Edinburgh: Heriot-Watt University.

Khanlou, N. et al. (2015). "It is an Issue of not Knowing Where to Go": Service Providers' Perspectives on Challenges in Accessing Social Support and Services by Immigrant Mothers of Children with Disabilities. *Journal of Immigrant and Minority Health*, 17: 1840-1847.

Link, B.G. and Phelan, J.C. (2001) Conceptualizing Stigma. *Annual Review of Sociology*, 27: 363-385.

Luchenski S, Maguire N, Aldridge RW, Hayward A, Story A, Perri P, Withers J, Clint S, Fitzpatrick S, Hewett N. (2018) What works in inclusion health: overview of effective interventions for marginalised and excluded populations. *Lancet*; 391: 266-280

Morrison, D. S. (2009). Homelessness as an independent risk factor for mortality: results from a retrospective cohort study. *International Journal of Epidemiology*, 38, 877–883.

National Records of Scotland (2017). Dundee City Council Area Profile. Available at: www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/dundee-city-council-profile.html, accessed November 2018.

Redes da Mare (2000). *Guia de Servicos da Mare*.

Richardson & Asthana (2006). Inter-agency Information Sharing in Health and Social Care Services: The Role of Professional Culture. *British Journal of Social* 36, 657-669.

Robinson, M. & Cottrell, D. (2005). Health Professionals in multidisciplinary and multi-agency teams; Changing professional practice. *Journal of Interprofessional Care*, Dec 2005; 19: 547-560.

Rodriguez, A; Arora, G; Fernandes, F; Freeman, R. (2019). In *Smile4life: Reflexive Mapping Exercise for Better Health and Social Care for Homeless People*. NHS Health Scotland, Edinburgh, 126p.

Salmon, G. (2004). Multy-agency collaboration: the challenges for CAMHS. *Child & Adolescent Mental health*, 9, 156-161.

Scottish Government (2011). Report on the Future Delivery of Public Services by the Commission chaired by Dr Campbell Christie. Published on 29 June 2011. Available at <https://www.gov.scot/Publications/2011/06/27154527/0>, accessed in October 2018. Accessed in March 2018

Scottish Government (2014). Public Bodies (Joint Working) (Scotland) Act 2014. Scottish Government.

Scottish Government (2016a). Housing Options Guidance. Available at <https://www.gov.scot/publications/housing-options-guidance/>, accessed in September 2018.

Scottish Government (2016b). The Scottish Index of Multiple Deprivation 2016- Introduction. Edinburgh: Scottish Government. Available at <https://www2.gov.scot/Topics/Statistics/SIMD>, accessed Jan 2019.

Scottish Government (2018). Health and Homelessness in Scotland. Edinburgh: Scottish Government. <https://www.gov.scot/Publications/2018/06/7974/0>, accessed in October 2018.

Scottish Housing Regulator (2014). Housing Options in Scotland – A Thematic Inquiry. <https://www.scottishhousingregulator.gov.uk/landlord-performance/national-reports/thematic-work/housing-options-in-scotland>, accessed in September 2019.

Shelter Scotland. What is the definition of Homelessness? Available at: https://scotland.shelter.org.uk/get_advice/advice_topics/homelessness/help_from_the_councils_housing_department/the_councils_homelessness_tests/are_you_homeless. Accessed in 19th March 2019.

Sprake, et al. (2014). Food choice and nutrient intake amongst homeless people. *Journal of Human Nutrition and Dietetics*, 27, 242-250.